

EXHIBIT A

PROJECT NO.

81

BOOK NO.

TITLE

Work continued from Page

~~XXXXXXXXXX~~ Acid functionalization of SWNT.

5 Use. 70:30 HNO_3 : H_2SO_4

First filter SWNT from toluene \rightarrow by centrifuge in CH_3OH . (0.5 g).

10 Immerse the filtered SWNT in the acid mixture (0.5 gm in 200 ml)

Stir for 5 hours.

15 Filter the acid treated SWNT.

Dry in vacuum @ 10^{-5} Torr for 24 hrs.

20 Take about 0.22 gm of acid functionalized

SWNT + 1.5 gm octadecylamine (ODA).

heat the mixture between $90 - 100^\circ\text{C}$

25 for 96 hrs. + another 98 hrs.

Work continued to Page

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605 MADE IN USA

DATE

SIGNATURE

DATE

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

B 100 P

TITLE

PROJECT NO.

83

BOOK NO.

Work continued from Page

~~SECRET~~ Extraction of the ODA functionalized
SLOTT.

- 1) Stop the reaction
- 2) Cool to room temp.
- 3) Add 200 ml EtOH to the reaction flask,
Stir for 30 min, & filter through 0.22 μ Teflon
- 4) Repeat step 3 (4 times).

The mass on the filter paper is
unreacted excess amine.

Now to the black solid in the ^{reaction} flask, add
300 ml of THF & stir overnight.

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605 MADE IN USA

Work continued to Page

SIGNATURE

DATE

DISCLOSED TO AND UNDERSTOOD BY


DATE

WITNESS

DATE

BEST AVAILABLE COPY

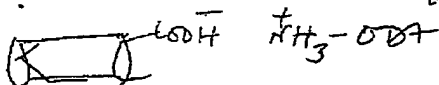
84

 Add another 600 ml THF to the reaction flask, Stir for 1 hr & then stop stirring & let the mixture settle & sediment.

Black colored solution.

The solution should have functionalized

SiO₂NT



zwitter ion.